

Summary

Key Findings

KEY FINDINGS

AUSTRALIANS

In 2018, the median weekly earnings of all Australians was \$1066¹. This means that half of all Australians earned less than \$1066 per week.

- 25 per cent earned less than \$680 per week
- 75 per cent earned less than \$1578 per week
- 90 per cent earned less than \$2228 per week

The median hourly earnings of all Australians was \$31.30 per hour.

The median earnings of full-time workers was \$1320 per week, and for part-time workers it was \$530 per week.

Male full-time workers earned a median pay of \$1400 per week, and female full-time workers earned \$1229. Males who worked full-time earned a median hourly rate of \$34.90 per hour, and females who worked full-time earned \$32.90 per hour.

Females who worked part-time had median earnings of \$550 per week, and median earnings for males who worked part-time was \$480 per week. The median hourly rate for female part-time workers was \$27.50 per hour and males who worked part-time earned a median rate of \$25.30 per hour.

Chart 1: Employees Median Weekly Earnings in Main Job by Sex

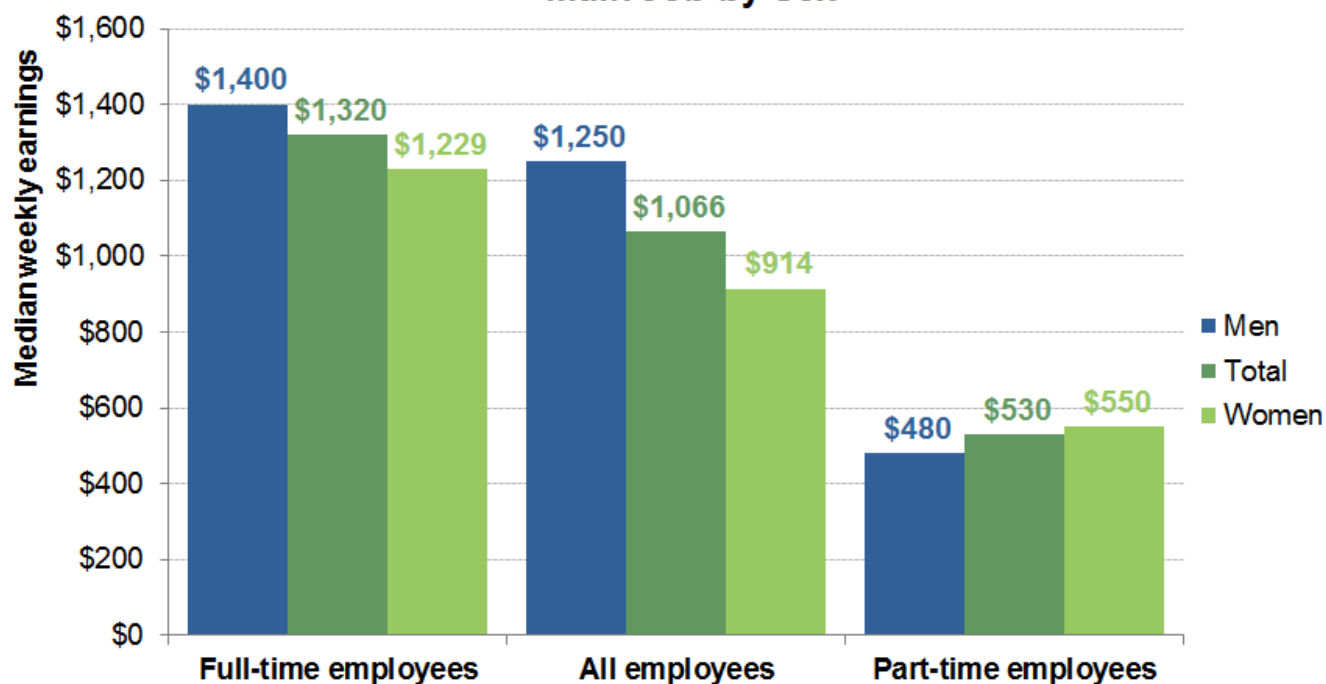
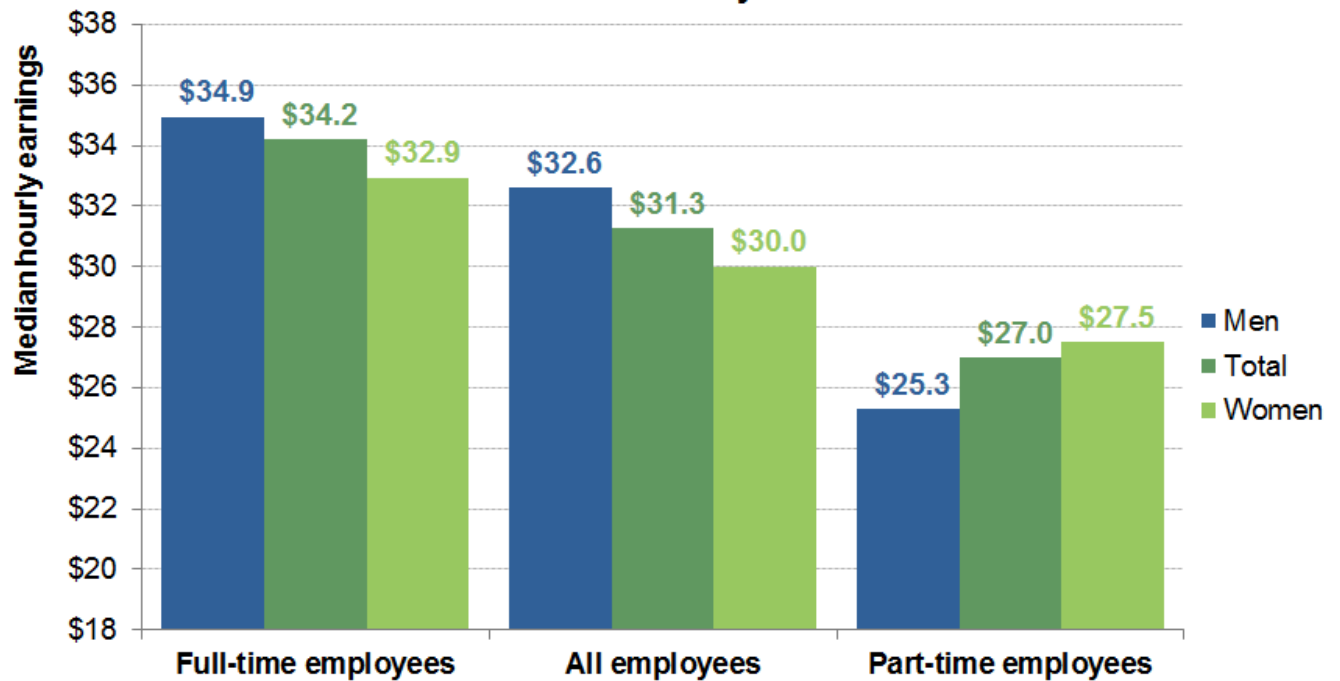


Chart 2: Employees Median Hourly Earnings in Main Job by Sex



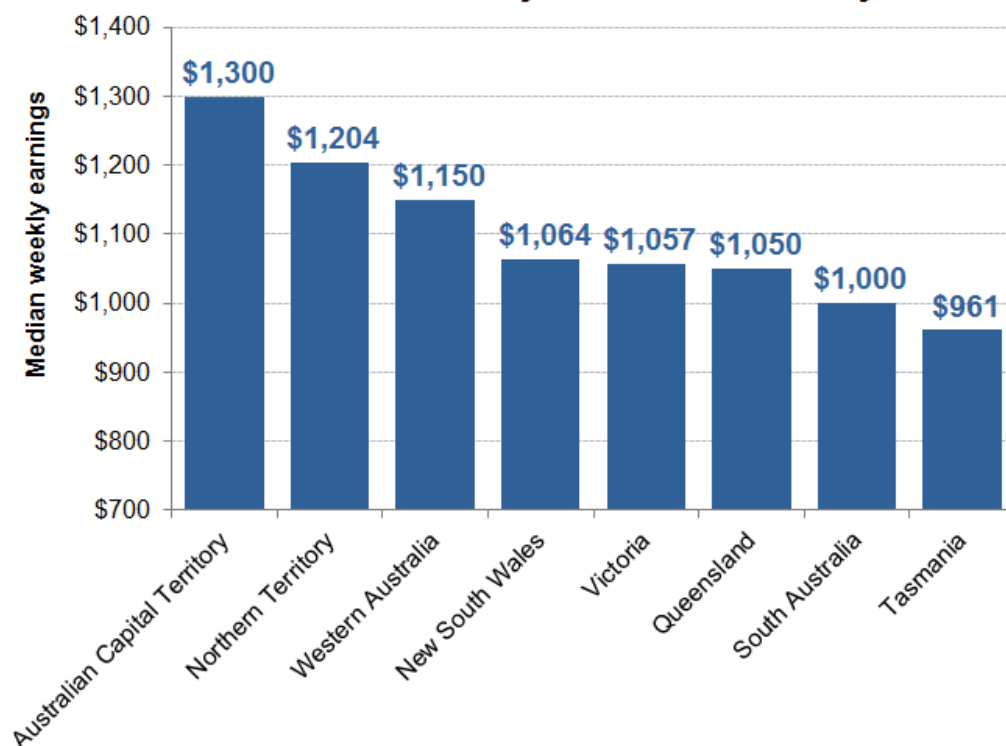
Source: Tables 2

STATES AND TERRITORIES

In 2018, the Australian Capital Territory was the region with the highest median earnings for employees at \$1,300 per week, followed by the Northern Territory at \$1,204. South Australia and Tasmania had the lowest median earnings for employees at \$1,000 and \$961 respectively (Chart 3).

Of the state capital cities, Perth held the highest median weekly earnings for employees at \$1,167 per week, ahead of Sydney and Brisbane with \$1,100. Regional South Australia had the lowest overall median earnings for employees at \$922.

**Chart 3: Employees Median Weekly Earnings
in Main Job by State and Territory**

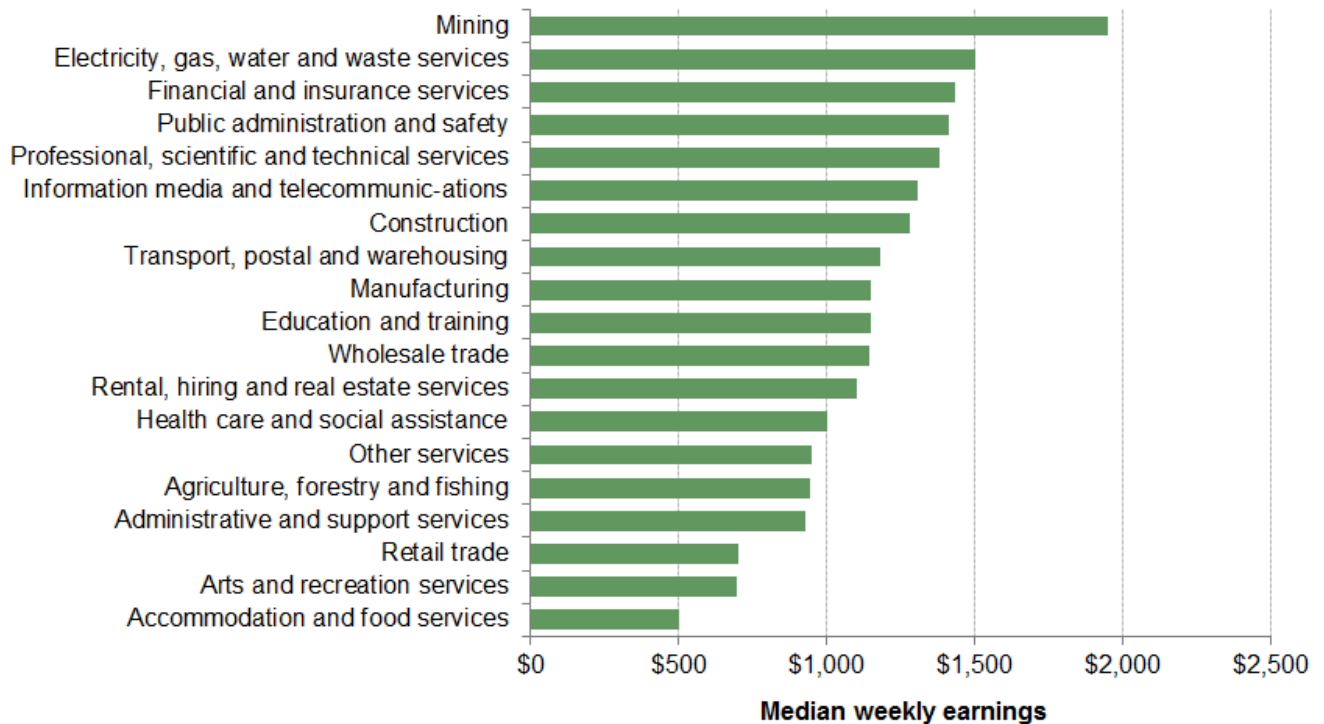


Source: Table 2

INDUSTRY OF MAIN JOB

The top three industries with the highest median weekly earnings for employees were Mining (\$1,950), Electricity, Gas, Water and Waste Services (\$1,500), and Financial and Insurance Services (\$1,434). The industries with the lowest median weekly earnings for employees were Retail Trade (\$700) Arts and Recreation Services (\$699), and Accommodation and Food Services (\$500).

Chart 4: Employees Median Weekly Earnings in Main Job by Industry



The industries with the biggest gap between the median hourly earnings of men and women employees were Financial and Insurance Services (\$47 per hour for men, \$37 for women), Professional, Scientific and Technical Services (\$43 for men, \$36 for women) and Education and Training (\$44 for men, \$37 for women). Industries with similar median hourly earnings for men and women employees (a gap of \$1.50 or less) were:

- Mining;
- Agriculture, Forestry and Fishing;
- Accommodation and Food Services;
- Arts and recreation services;
- Retail Trade;
- Wholesale Trade; and
- Transport, postal and warehousing.

Source: Table 3

OCCUPATION AND SKILL LEVEL OF MAIN JOB

Employees with a high skill level job (skill level 1) had a middle range (interquartile range) of earnings between \$1,080 and \$2,090 per week. In contrast, employees in low skilled jobs (skill level 5) had middle range earnings between \$300 and \$914.

Managers had the largest gap between the median hourly earnings of men and women (\$46 per hour for men, \$40 for women), followed by Professionals (\$47 for men, \$43 for women).

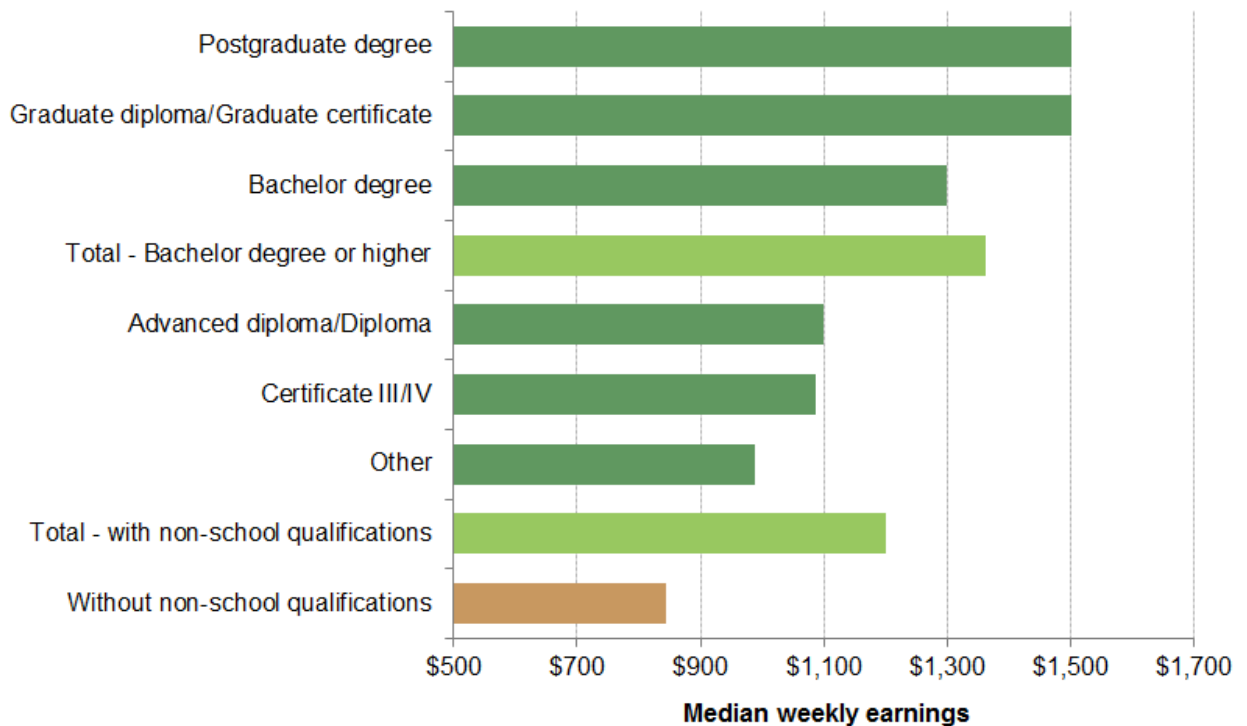
Source: Table 4

HIGHEST NON-SCHOOL QUALIFICATION

Employees with a Postgraduate degree, Graduate diploma or Graduate Certificate had the highest median earnings of \$1,500 per week, compared with \$1,300 for those with a Bachelor degree, and \$1,087 for those with a Certificate III/IV qualification (Chart 5).

Employees who had a non-school qualification had median weekly earnings which were \$356 higher than employees without a non-school qualification (Chart 5).

Chart 5: Employees Median Weekly Earnings in Main Job by Educational Attainment



Source: Table 5

INDEPENDENT CONTRACTORS

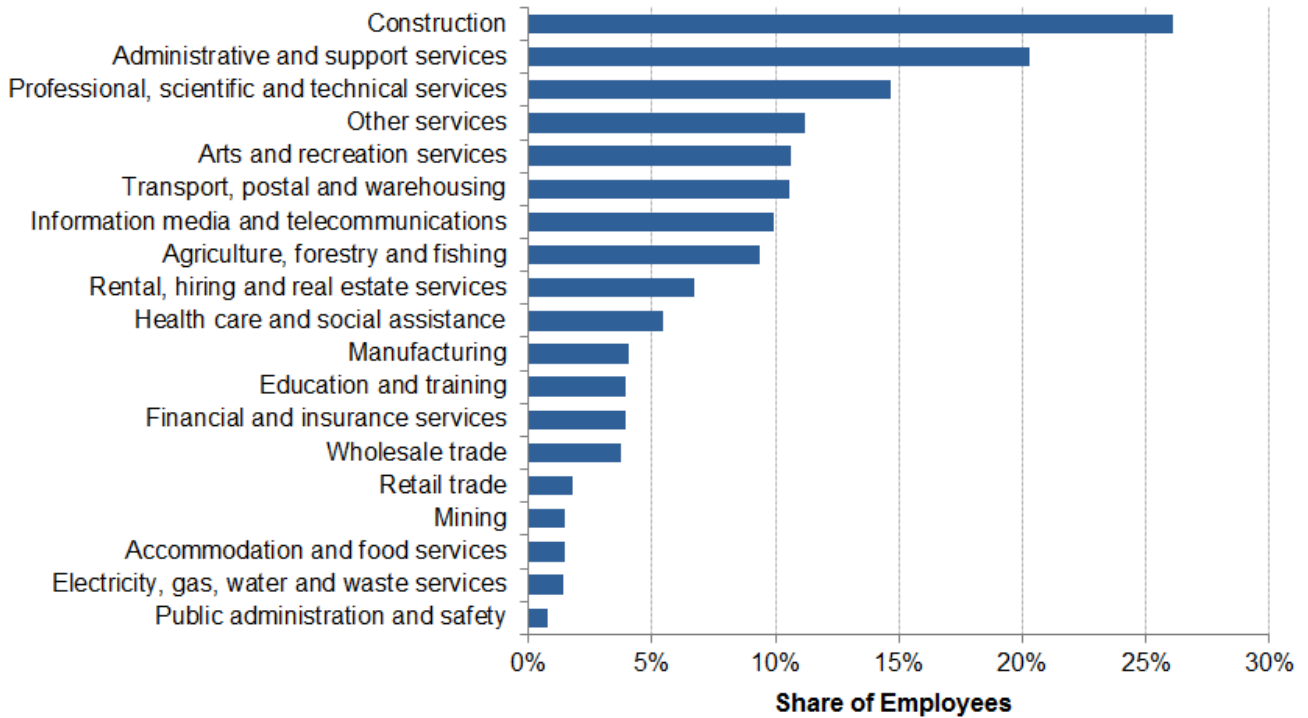
Additional questions in the Characteristics of Employment survey allow for employment relationships to be reclassified using the Form of Employment in main job classification (see Forms of Employment (Appendix)). This enables people's employment relationships to be classified as either:

- Employees;
- Independent Contractors; or
- Other Business Operators.

Of the 12.6 million people who were employed in August 2018, approximately 8% were classified as Independent Contractors. Of these, 37% stated they did not have sole authority over their work. The industries with the highest proportion of Independent Contractors were:

- Construction (26%); and
- Administrative and Support Services (20%).

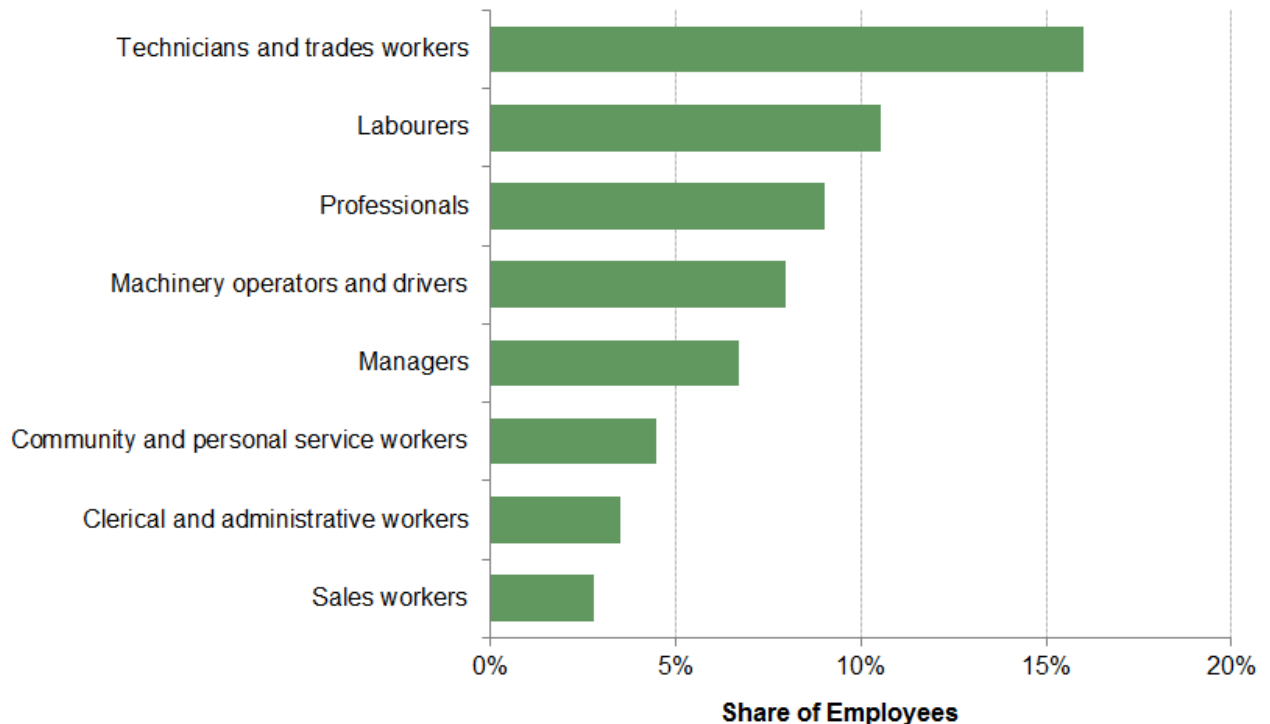
Chart 6: Share of Employees Classified as Independent Contractors by Industry of Main Job



The occupations with the highest proportions of Independent Contractors were:

- Technicians and trades workers (16%);
- Labourers (11%); and
- Professionals (9%).

Chart 7: Share of Employees Classified as Independent Contractors by Occupation of Main Job



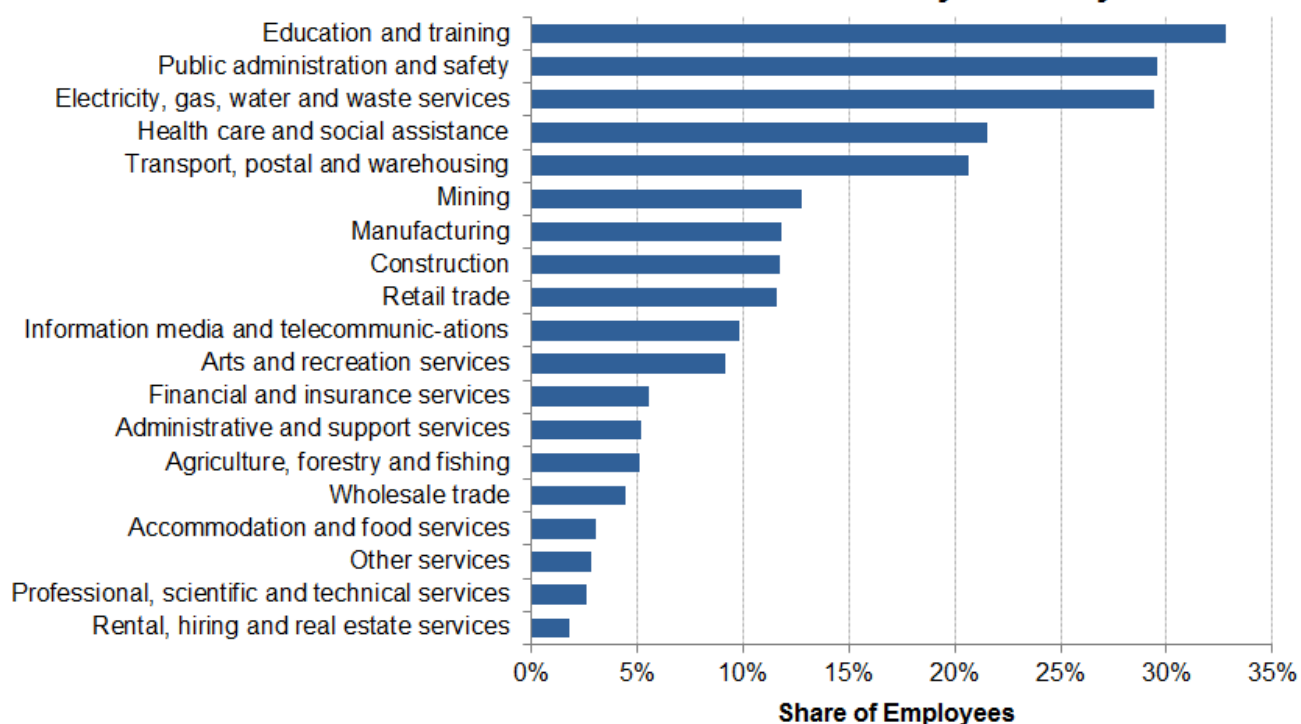
Source: Tables 9 to 11

Of the 10.5 million employees who were surveyed in August 2018, 15% reported being a member of a Trade Union associated with their main job. The median earnings for employees who were Trade Union members in their main job were \$1,300 per week, compared with \$1,025 for employees who were not members of a Trade Union related to their main job.

The proportion of employees who reported being Trade Union members in their main job varied depending on their Industry and Occupation (Charts 8 and 9). The industries with the highest proportion of employees who were Trade Union members were:

- Education and Training (33%);
- Public Administration and Safety (30%); and
- Electricity, Gas, Water and Waste Services (29%).

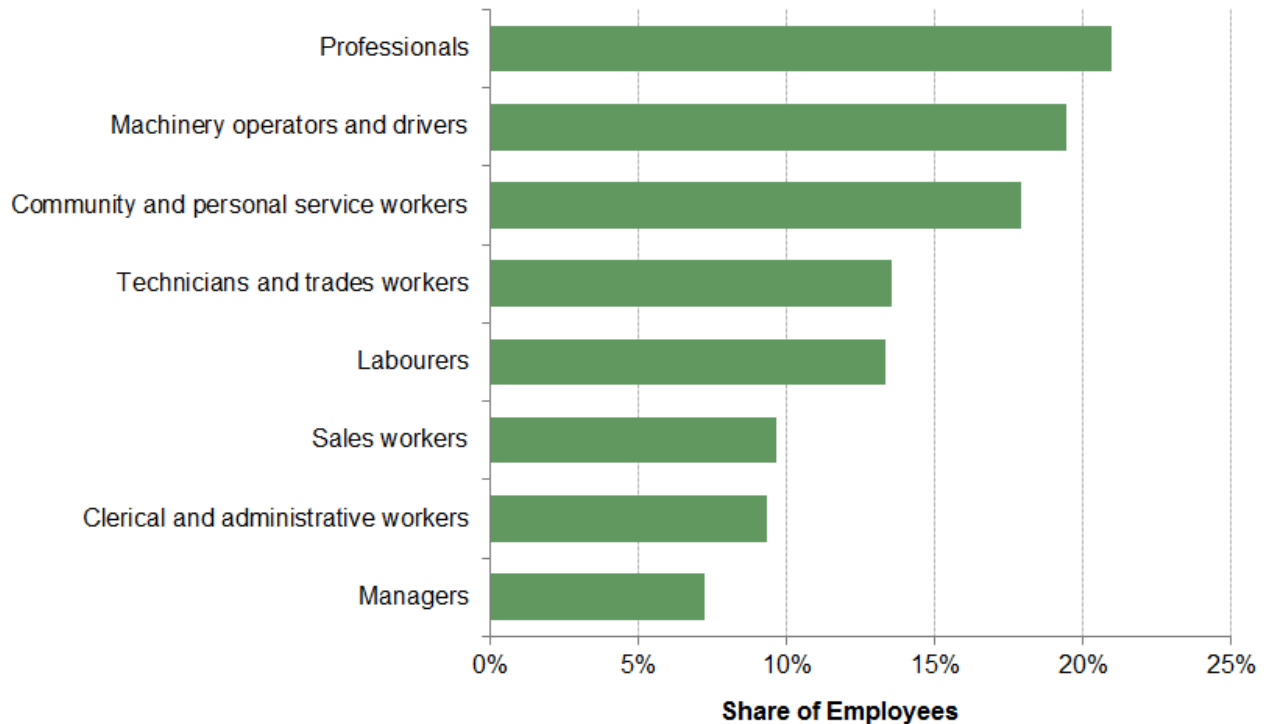
Chart 8: Share of Employees who are Members of a Trade Union in their Main Job by Industry



The occupations which recorded the highest proportion of employees who were Trade Union members were:

- Professionals (21%);
- Machinery Operators and Drivers (19%); and
- Community and Personal Service Workers (18%).

Chart 9: Share of Employees who are Members of a Trade Union in their Main Job by Occupation



Source: Tables 3 and 4

LABOUR HIRE

Four per cent of employees reported being registered with a labour hire firm or employment agency. Of these, 32% reported they were paid by a labour hire firm or employment agency.

The median weekly earnings for employees who were paid by a labour hire or employment agency were \$1,023, versus \$1,071 for employees who were not registered with a labour hire or employment agency.

The occupations with the highest proportion of employees who were paid by a labour hire firm or employment agency were:

- Machinery Operators and Drivers (3%); and
- Labourers (2%).

Source: Tables 13

CASUAL EMPLOYMENT

One of the main indicators for casual employment is whether an employee is entitled to paid leave, such as paid sick leave or paid annual leave. These entitlements are usually reserved for non-casual or permanent employment.

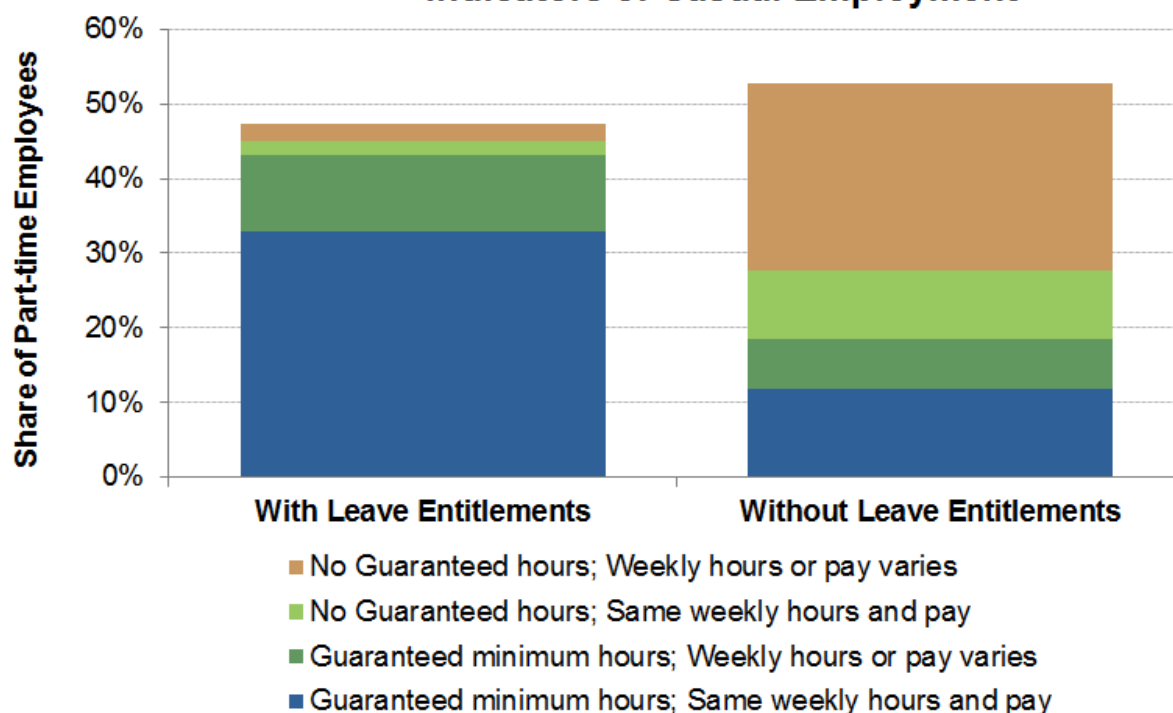
In August 2018, 25% of employees were not entitled to paid leave (2.6 million). Of those who work part-time in their main job, 53% were not entitled to paid leave (1.8 million).

Quarterly measures of paid leave entitlements have been collected in the Labour Force Survey since August 2014, and are available in Table 13 of Labour Force, Australia, Detailed, Quarterly (cat. no. 6291.0.55.003).

There are several other indicators of casual employment. For employees in August 2018:

- 24% have earnings that vary from one period to the next (excluding overtime payments) (2.5 million);
- 21% do not usually work the same number of hours each week (2.2 million); and
- 19% do not have a guaranteed minimum number of hours each week (2.0 million).

Chart 10: Share of Part-time Employees by Various Indicators of Casual Employment



Source: Tables 1c and 7

¹ In August 2018, there was an increase in the number of respondents who chose not to provide information about their earnings in main job. Analysis has shown that the usual process of imputing for this missing data has not significantly impacted median earnings estimates. More details are provided in paragraphs 21 and 22 of the Explanatory notes. For more information, please contact labourforce@abs.gov.au

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About this Release

Contains information on: weekly earnings of employees which shows the distribution of weekly earnings of all wage and salary earners classified by full-time/part-time workers; employment characteristics which presents data on trade union membership, fixed-term contracts, and independent contracts all of which can be cross classified by other employment characteristics such as hours worked, industry, occupation and sector of job as well as personal characteristics.

History of Changes

02/03/2020

Two issues have been identified in the compilation of earnings estimates used for mean earnings in Tables 3-5, and relating to whether worked weekdays and/or weekends in all jobs in Table 7 (found under the Downloads tab). These estimates have been revised in the August 2019 release of Characteristics of Employment.

27/09/2019

An issue has been identified in the compilation of estimates relating to usual days worked in Table 7 (found under the Downloads tab). These estimates will be revised in the upcoming August 2019 release of Characteristics of Employment.

Explanatory Notes

Explanatory Notes

EXPLANATORY NOTES

INTRODUCTION

1 The statistics in this publication were compiled from information collected in the Characteristics of Employment (COE) survey conducted throughout Australia in August 2018 as a supplement to the Australian Bureau of Statistics' (ABS) monthly Labour Force Survey (LFS). Respondents to the LFS who fell within the scope of the supplementary survey were asked further questions.

2 Information about survey design, scope, coverage and population benchmarks relevant to the monthly LFS, which also applies to supplementary surveys, can be found in the publication Labour Force, Australia (cat. no. 6202.0).

CONCEPTS, SOURCES AND METHODS

3 The conceptual frameworks used in the monthly LFS align closely with the standards and guidelines set out in Resolutions of the International Conference of Labour Statisticians. Descriptions of the underlying concepts and structure of Australia's labour force statistics, and the sources and methods used in compiling these estimates, are presented in Labour Statistics: Concepts, Sources and Methods (cat. no. 6102.0.55.001).

4 The conceptual framework for measures of mean and median earnings aligns closely with the standards and guidelines set out in the System of National Accounts 2008, and Resolutions of the International Conference of Labour Statisticians.

SCOPE

5 The scope of the LFS is restricted to people aged 15 years and over and excludes the following people:

- members of the permanent defence forces;
- certain diplomatic personnel of overseas governments, customarily excluded from the Census and estimated populations;
- overseas residents in Australia; and
- members of non-Australian defence forces (and their dependants).

6 Students at boarding schools, patients in hospitals, residents of homes (e.g. retirement homes, homes for people with disabilities), and inmates of prisons are excluded from all supplementary surveys.

7 This supplementary survey was conducted in both urban and rural areas in all states and territories, but excluded persons living in Aboriginal and Torres Strait Islander communities.

8 In addition to those already excluded from the LFS, contributing family workers, persons not in the labour force and unemployed persons were also excluded.

COVERAGE

9 The estimates in this publication relate to persons included in the survey in August 2018. In the LFS, coverage rules are applied, which aim to ensure that each person is associated with only one dwelling, and hence has only one chance of selection in the survey. See Labour Force, Australia (cat. no. 6202.0) for more details.

SAMPLE SIZE

10 Supplementary surveys are not always conducted on the full LFS sample. Since August 1994 the sample for supplementary surveys has been restricted to no more than seven-eighths of the LFS sample.

11 This survey is partially based on the new sample introduced into LFS in July 2018 (at most two rotation groups, or up to 29% of the sample). The new sample design has adopted the use of the Address Register as the sampling frame for unit selection, and the sampling fractions for selection probabilities within each state have been updated to reflect the most recent population distribution based on results from the 2016 Census of Population and Housing. As with each regular sample design, the impacts on the data are expected to be minimal. For more information, see the Information Paper: Labour Force Survey Sample Design, Jul 2018 (cat. no. 6269.0).

RELIABILITY OF THE ESTIMATES

12 Estimates in this publication are subject to sampling and non-sampling errors:

- Sampling error is the difference between the published estimate and the value that would have been produced if all dwellings had been included in the survey. For more information, see the Technical Note.
- Non-sampling errors are inaccuracies that occur because of imperfections in reporting by respondents and interviewers, and errors made in coding and processing data. These inaccuracies may occur in any enumeration, whether it be a full count or a sample. Every effort is made to reduce the non-sampling error to a minimum by careful design of questionnaires, intensive training and effective processing procedures.

SEASONALITY

13 The estimates are based on information collected in the survey month (August) and, due to seasonality, may not be representative of other months of the year. For example, the numbers of employees working on weekdays and weekends will be representative for an August month but not necessarily representative of all months in the year.

14 To reduce the impact of seasonality on **total** employment, the estimates have been adjusted by factors based on **trend** LFS estimates. These factors were applied at the State and Territory, Sex, Full-time and Total employment levels, based on the trend LFS series as published in the August 2018 issue of Labour Force, Australia (cat. no. 6202.0). This adjustment accounts for August seasonality and irregular effects, resulting in an increase to the typically lower original employed estimates for August.

15 In August 2017, historical estimates re-published from surveys conducted in different survey months (May and November) will be subject to different seasonal impacts, which may result in an observable break in series between the historical data and data collected in COE. Trend factors have also been applied to these historical estimates to reduce the impact of seasonality on total employment estimates.

CLASSIFICATIONS USED

16 Country of birth data are classified according to the Standard Australian Classification of Countries (SACC), 2011 (cat. no. 1269.0).

17 Occupation data, including skill level of main job, are classified according to ANZSCO - Australian and New Zealand Standard Classification of Occupations, 2013, Version 1.2 (cat. no. 1220.0).

18 Industry data are classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 2.0) (cat. no. 1292.0).

19 Education data are classified according to the Australian Standard Classification of Education (ASCED), 2001 (cat. no. 1272.0).

20 Geography data are classified according to the Australian Statistical Geography Standard (ASGS), 2011 (cat. no. 1270.0.55.001).

NOTES ON ESTIMATES

21 Where information relating to earnings in both main job and/or second job was not provided by the respondent, values have been imputed. In August 2018, there were 5,316 cases where information relating to earnings in main job was not provided by the respondent and 192 cases where information relating to earnings in second job was not provided by the respondent. Where this was the only information missing from the respondent record, the value was imputed based on answers provided from another respondent with similar characteristics (referred to as the "donor"). Donor records were selected for imputation of earnings in main job by matching information on sex, age, state or territory of usual residence and selected labour force characteristics (full-time or part-time in main job, industry, occupation, hours worked in main job, owner manager status) of the person with missing information.

22 Donor records were selected for imputation of earnings in second job by matching information on age, state or territory of usual residence, area of usual residence, owner manager status, hours worked in second job and frequency of pay in second job. Depending on which values were imputed, donors were chosen from the pool of individual records with complete information for the block of questions where the information was missing.

Earnings

23 Estimates relating to mean and median weekly earnings generally exclude owner managers of incorporated enterprises (OMIEs) unless otherwise stated. Employees who only received payment in kind were also excluded.

Hourly rate

24 Estimates relating to mean and median hourly rate generally exclude owner managers of incorporated enterprises (OMIEs) unless otherwise stated. Employees who only received payment in kind or worked zero hours while on workers compensation were also excluded.

Leave entitlements

25 Employees have been classified as 'With paid leave entitlements' if they were entitled to paid sick leave and/or paid holiday leave. In all other cases, employees have been classified as 'Without paid leave entitlements' and are also referred to as "casual employees".

COMPARABILITY OF TIME SERIES

26 The LFS estimates and estimates from the supplementary surveys, (e.g. COE) are calculated in such a way as to sum to the independent estimates of the civilian population aged 15 years and over (population benchmarks). These population benchmarks are updated quarterly based on Estimated Resident Population (ERP) data.

27 From August 2015, Labour Force Estimates have been compiled using population benchmarks based on the most recently available release of ERP data, continually revised on a quarterly basis. At the time of publication, this issue's estimates are comparable with the published labour force estimates for August 2018.

28 From August 2017, the estimates in this publication have moved to regular rebenchmarking to reflect the latest revisions to ERP data and updated trend LFS estimates.

29 In August 2017, historical estimates re-published from previous supplementary surveys have been revised to reflect the latest benchmarks and trend LFS estimates for employment (as at November 2017). These include estimates from the previous surveys:

- Employee Earnings, Benefits and Trade Union Membership, Australia, August 2004-13 (cat. no. 6310.0) (EEBTUM)
- Forms of Employment, Australia, November 2008-13 (cat. no. 6359.0) (FOES)
- Working Time Arrangements, Australia, November 2006, 2009 and 2012 (cat. no. 6342.0) (WTA)
- Education and Work, Australia, May 2004-05 and 2007-12 (cat. no. 6227.0). (SEW)

30 For the historical estimates re-published from surveys run in months other than August, two kinds of estimates have been produced.

- For estimates relating to the number of employees or number of employed persons, estimates have been revised based on the full set of respondents who completed the survey for that month.
- For estimates relating to weekly earnings and hourly rates, the data are based on the respondents who remained employed, remained in sample, and provided information in both the non-August survey and the nearest next or previous August survey. This allowed for the earnings information collected in August to be merged with the complementary data collected in the other months (for example, merging August EEBTUM earnings with the highest non-school qualification data collected in the May SEW). Relative Standard Errors (RSEs) for these estimates are higher than usual, with less than half of the full sample common between both surveys.

31 When comparing results from the 2017 and 2018 issues of COE to previous surveys, it is recommended to use the revised and re-published estimates provided within the current issue. In previous publications, caution should be exercised when comparing results, as the definition of employees is not always directly comparable to the current definition. Changes to the employee definition involved excluding Owner Managers of Incorporated Enterprises (OMIEs) and including persons who worked for a commission only without a retainer. In this publication, time series of employee estimates are presented on a consistent basis.

32 From August 2014 collection of earnings in second job was changed to match the collection of earnings in main job. Previously, earnings in second job was collected from respondents who were employees in their second job who actually worked some hours in their second job in the reference week. Earnings were reported for those hours actually worked in that job. From 2014, earnings in second job were collected from employees in their second job regardless of whether they worked in that job in the reference week. Earnings data and frequency of pay in that second job were subsequently collected. This change will result in a break in series of earnings in all jobs and earnings in second job. Caution should be exercised when comparing second and all job earnings data from COE with previous EEBTUM data.

33 Prior to 2014, information about trade union membership was collected only of employees and owner managers or incorporated enterprises. From 2014 onwards, information on trade union membership is collected from all employed people.

34 For information on the history of changes to EEBTUM, see the Explanatory Notes (cat. no. 6310.0).

35 For information on the history of changes to FOE, see the Explanatory Notes (cat. no. 6359.0).

Salary sacrifice

36 The estimates of earnings in this publication are produced in accordance with the conceptual framework for measures of employee remuneration, as outlined in Information paper: Changes to ABS Measure of Employee Remuneration, Australia 2006 (cat. no. 6313.0).

37 From 2007, as a result of a change in the concept of earnings being measured, employees and OMIEs were asked to include salary sacrifice when estimating their earnings. In previous years, there was no explicit reference to the treatment of salary sacrifice. It is probable that some employees were already including amounts of salary sacrifice in their estimates of earnings, depending upon how their pay was reported. This change has resulted in a break in series. Users need to exercise care when comparing the earnings of employees and OMIEs in this release with those prior to 2007.

Imputation

38 From 2017, additional information relating to the hourly rate and the skill level of main job were added to the imputation process for main job earnings. The current method has been applied to all of the COE surveys run between 2014 and 2018.

39 From 2014, additional information relating to the number of hours usually worked and the frequency of pay in a respondent's second job were added to the imputation process for second job earnings.

40 From 2009, additional information relating to the number of hours that a respondent's last pay period covered in their main job was added to the imputation process for main job earnings.

41 Aside from the changes listed above, the current imputation method has been used since the 2005 survey. A similar method of imputation was used for the 2004 survey. The differences between the 2004 and the current imputation method are that donors are matched, where possible at a finer level of detail; and second job earnings are imputed whereas in 2004 they were not.

42 Prior to 2004, imputation was not used. Employees whose weekly earnings could not be determined were excluded from estimates of mean or median weekly earnings. Care should be taken when comparing earnings data from 2004 onwards with earnings data prior to 2004. To compare the change in methodology from 2003 to 2004 see paragraph 28 of the Explanatory Notes in the August 2004 Employee Earnings, Benefits and Trade Union Membership (cat. no. 6310.0).

COMPARABILITY WITH MONTHLY LFS STATISTICS

43 Due to differences in the scope and sample size of this supplementary survey and that of the monthly LFS, the estimation procedure may lead to some small variations between labour force estimates from this survey and those from the LFS.

COMPARABILITY WITH EMPLOYER-BASED SURVEYS

44 Caution should be exercised when comparing estimates of earnings in this release with estimates of earnings included in the biannual Average Weekly Earnings, Australia (cat. no. 6302.0) and two-yearly Employee Earnings and Hours, Australia (cat. no. 6306.0) publications. The data in both these publications are compiled from employer based surveys. There are important differences in the scope, coverage and methodology of these surveys which can result in different estimates of earnings from each survey.

45 The survey of Average Weekly Earnings (AWE) collects information from employers who provide details of their employees' total gross earnings and their total number of employees. The survey of Employee Earnings and Hours (EEH) collects information about weekly earnings and hours paid for, and the individual characteristics of a sample of employees within each selected employer unit. Both AWE and EEH are completed by employers with information from their payroll. However, for COE and EEBTUM, respondents are either the employed person or another adult member of their household who responds on their behalf. Where earnings are not known exactly an estimate is reported. There are also scoping differences between both household and employer surveys. For example, AWE and EEH exclude employees in the Agriculture, forestry and fishing industry, and also employees of Private households, whereas these employees are included in the COE and EEBTUM surveys.

46 The earnings series from AWE historically excluded amounts salary sacrificed. However, since the May 2011 AWE publication, the Average Weekly Cash Earnings (AWCE) series have also been released. These series are inclusive of salary sacrificed amounts. The key earnings series from AWE have continued to be published on the old conceptual basis (i.e. exclusive of amounts salary sacrificed) to maintain long term comparability of the key series. In EEH, the salary sacrificed amounts have been included in the estimates of mean and median weekly earnings from 2006 onwards. From 2007, COE and EEBTUM have included amounts salary sacrificed in the estimates of mean and

median weekly earnings.

47 For further information on a number of earning series available from ABS sources, please refer to the feature article Understanding earnings in Australia using ABS statistics published in Australian Labour Market Statistics, July 2014 (cat. no. 6105.0).

PREVIOUS SURVEYS

48 Similar surveys on weekly earnings have been conducted annually in August since 1975, except in 1991 when the survey was conducted in July, and in 1996 when the survey was not conducted. Prior to COE, weekly earnings were most recently published in Employee Earnings, Benefits and Trade Union Membership, Australia (cat. no. 6310.0) (EEBTUM).

49 Prior to 1999, the EEBTUM publication was titled Weekly Earnings of Employees (Distribution), Australia (cat. no. 6310.0). The change in title reflects the inclusion of employment benefits and trade union membership data previously released in other publications.

50 Results of previous surveys on employment benefits have been published in Weekly Earnings of Employees (Distribution), Australia, August 1997 (cat. no. 6310.0), The Labour Force, Australia, Jan 1995 (cat. no. 6203.0), and Employment Benefits, Australia (6334.0).

51 Information on trade union membership was first collected in a supplementary survey in 1976, again in 1982, then biennially in its current format from 1986 to 1990. Between 1992 and 2013, it was conducted annually (with only limited data available every second year). Prior to COE, results of previous surveys were published in EEBTUM and in Trade Union Members, Australia (cat. no. 6325.0).

52 Limited data on trade union membership have also been published in:

- Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007 (Re-issue) (cat. no. 6361.0);
- Weekly Earnings of Employees (Distribution), Australia, August 1997 (cat. no. 6310.0);
- Working Arrangements, Australia, November 2000 (cat. no. 6342.0); and
- Working Arrangements, Australia, November 2003 (cat. no. 6342.0).

53 Information on trade union membership provided from an annual census of trade unions is available in the following reports between 1891 and 1996:

- Labour and Industrial Branch Report, 1891-1912 (cat. no. 6101.0);
- Labour and Industrial Branch Report, 1911-1921 (cat. no. 6101.0);
- Labour Report, 1922-1973 (cat. no. 6101.0);
- Labour Statistics, 1975-1978 (cat. no. 6101.0);
- Labour Statistics, Australia 1979-1997 (cat. no. 6101.0);
- Trade Union Statistics, Australia, 1969-1996 (cat. no. 6323.0);

54 Information on Forms of employment was originally collected every 3 years between 1998 and 2004, followed by surveys in 2006 and 2007. In 2008, the survey was redeveloped to better capture information of independent contractors, other business operators and employees, and was collected annually on this basis until 2013. Results of previous surveys were published in the final issue of Forms of Employment, Australia, November 2013 (cat. no. 6359.0).

55 Information on Working Arrangements has been collected in a variety of surveys since 1976, as follows:

- Work Patterns of Employees, November 1976 (cat. no. 6328.0 / Ref. No. 6.70)
- Evening and Night Work, November 1976 (cat. no. 6329.0)
- Working Hours Arrangements, Australia, February to May 1981 (cat. no. 6338.0)
- Alternative Working Arrangements, Australia, 1982 and 1986 (cat. no. 6341.0)
- Working Arrangements, Australia, August 1993 and 1997 (cat. no. 6342.0)
- Working Arrangements, Australia, November 2000 and 2003 (cat. no. 6342.0)
- Working Time Arrangements, Australia, November 2006, 2009 and 2012 (cat. no. 6342.0)

PRODUCTS AND SERVICES

56 A number of Datacubes (spreadsheets) containing all tables produced for this publication are available from the Downloads tab of the publication. The Datacubes present tables of estimates and their corresponding Relative Standard Errors (RSEs). Revised and re-published historical data are also available in these Datacubes for the years 2004-2016.

57 For users who wish to undertake a more detailed analysis of the data, the survey microdata will be released through the TableBuilder product. For more details, refer to the TableBuilder information, Microdata: Characteristics of Employment, Australia (cat. no. 6333.0.00.001). For more information see About TableBuilder.

58 Special tabulations are available on request. Subject to confidentiality and sampling variability constraints, tabulations can be produced from the survey incorporating data items, populations and geographic area selections to meet individual requirements. These can be provided in printed or electronic form. All enquiries should be made to the National Information and Referral Service on 1300 135 070.

NEXT SURVEY

59 The next survey will be conducted in August 2019 and will contain information on overwork, job flexibility, working patterns and locations of work. Data on trade union membership, independent contractors and employment found through an employment agency or labour hire firm will not be collected in August 2019.

ACKNOWLEDGEMENT

60 ABS surveys draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the **Census and Statistics Act, 1905**.

RELATED PUBLICATIONS

61 Refer to Related Information tab for other ABS publications which may be of interest.

62 Current publications and other products released by the ABS are available from the Statistics Page on the ABS website. The ABS also issues a daily Release Advice on the website which details products to be released in the week ahead.

ROUNDING

63 As estimates have been rounded, discrepancies may occur between sums of the component items and totals.

Glossary

GLOSSARY

Agreement to work flexible hours

An agreement that is either in writing or otherwise. A written agreement can be in the form of, but not limited to, an individual written agreement between an employer and employee, or a Collective Agreement or Certified Agreement (CA) made directly between an employer and a group of employees.

Born in Australia

Includes persons born in Australia, Norfolk Island and Australian External Territories.

Continuous duration with current employer/business

The length of the current period of employment people had with their employer or in their own business. The length of time includes periods of paid leave, unpaid leave or strike.

Did not draw a wage or salary

Consists of persons who worked in their own incorporated enterprise only i.e. Owner managers of incorporated enterprises (OMIEs).

Employed persons

People aged 15 years and over who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind, in a job or business or on a farm (comprising employees, employers and own account workers); or

- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or
- were employees who had a job but were not at work and were:
 - away from work for less than four weeks up to the end of the reference week;
 - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week;
 - away from work as a standard work or shift arrangement;
 - on strike or locked out;
 - on workers' compensation and expected to return to their job; or
- were employers or own account workers who had a job, business or farm, but were not at work.

Contributing family workers in their main job were excluded from the Characteristics of Employment Survey.

Employees

From August 2014, the Characteristics of Employment (COE) Survey definition of employees differs from the definition used in surveys prior to July 2014 including, the Labour Force Survey, other household surveys (including earlier Forms of Employment, Employee Earnings, Benefits and Trade Union Membership and Working Time Arrangements surveys). Commencing in 2017, estimates for periods prior to 2014 published in Characteristics of Employment, Australia (cat. no. 6333.0) have been updated and revised to meet the new definition. See Appendix: Status of employment and population concordance for more information.

Employees are persons who:

- worked for a public or private employer; and
- received remuneration in wages or salary; or are paid a retainer fee by their employer and worked on a commission basis, for tips, piece-rates or payment in kind.

Employment agency

An employment agency is an organisation which is engaged in personnel search, or selection and placement of people for an employing organisation. The agency or firm may also be engaged in supply of their own employees to other employers, usually on a short-term basis. (See also labour hire firm).

Fixed-term contract

A contract of employment which specifies that the employment will be terminated on a particular date/event.

Full-time workers in main job

People who were employees and usually work 35 hours or more a week in their main job, or usually work fewer than 35 hours but worked 35 hours or more in their main job during the reference week

Full-time workers

Employed persons who usually worked 35 hours or more a week (in all jobs) and others who, although usually worked less than 35 hours a week, worked 35 hours or more during the reference week. These people were classified as full-time workers.

Holiday leave

The entitlement of an employee to paid holiday, paid vacation or paid recreation leave in their main job.

Hours paid for in main job

The number of hours for which employees and OMIEs were paid in their main job in their last pay, not necessarily the number of hours actually worked during the reference week (e.g. a person on paid leave for the week was asked to report the number of hours for which they were paid).

Hours usually worked

The number of hours usually worked in a week.

Hours worked

The number of hours actually worked during the reference week.

Independent contractors

Independent contractors are persons who operate their own business and who are contracted to perform services for

others without having the legal status of an employee, i.e. persons who are engaged by a client, rather than an employer to undertake the work. Independent contractors are engaged under a contract for services (a commercial contract), whereas employees are engaged under a contract of service (an employment contract).

Independent contractors' employment may take a variety of forms, for example, they may have a direct relationship with a client or work through an intermediary. Independent contractors may have employees, however they spend most of their time directly engaged with clients or on client tasks, rather than managing their staff.

Industry

An industry is a group of businesses or organisations that undertake similar economic activities to produce goods and/or services. In this publication, industry refers to ANZSIC Division as classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 2.0) (cat. no. 1292.0).

Labour hire firm

A labour hire firm is an organisation which is engaged in personnel search, or selection and placement of people for an employing organisation. The agency or firm may also be engaged in supply of their own employees to other employers, usually on a short-term basis. (See also employment agency).

Labour hire workers

Labour hire workers are persons who found their job through a labour hire firm/employment agency and are paid by the labour hire firm/employment agency.

Level of highest educational attainment

Level of highest educational attainment identifies the highest achievement a person has attained in any area of study. It is not a measurement of the relative importance of different fields of study but a ranking of qualifications and other educational attainments regardless of the particular area of study or the type of institution in which the study was undertaken. It is categorised according to the Australian Standard Classification of Education, 2001 (cat. no. 1272.0) Level of education classification.

Level of highest non-school qualification

A person's level of highest non-school qualification is the highest qualification a person has attained in any area of formal study other than school study. It is categorised according to the Australian Standard Classification of Education, 2001 (cat. no. 1272.0) Level of education classification.

Main job

The job in which the most hours were usually worked.

Maternity/paternity leave

The provision by an employer of paid maternity/paternity leave.

Mean weekly earnings

The amount obtained by dividing the total earnings of a group by the number of employees and OMIEs in that group.

Median weekly earnings

The amount which divides the distribution of employees and OMIEs into two groups of equal size, one having earnings above and the other below that amount.

Multiple jobholder

Employed persons who, during the reference week, worked in more than one job. Multiple jobholders exclude those who changed employer during the reference week. People who were unpaid voluntary workers or on unpaid trainee/work placement in their second job were excluded from the Multiple jobholder population.

Information on earnings in main job is collected from all multiple jobholders. Information on earnings in second job is only collected from multiple jobholders who were employees or OMIEs in their second job and were an employee or OMIEs in their main job.

Occupation

An occupation is a collection of jobs that are sufficiently similar in their title and tasks, skill level and skill specialisation which are grouped together for the purposes of classification. In this publication, occupation refers to Major Group and

Skill Level as defined by ANZSCO - Australian and New Zealand Standard Classification of Occupations, 2013, Version 1.2 (cat. no. 1220.0).

On call

A shift arrangement, for being available, when not at work, to be contacted to resume work. An allowance may be paid to the employee for being on call.

Overtime

Work undertaken which is outside, or in addition to, ordinary working hours in main job, whether paid or unpaid.

Owner managers of incorporated enterprises (OMIEs)

People who work in their own incorporated enterprise, that is, a business entity which is registered as a separate legal entity to its members or owners (may also be known as a limited liability company).

An owner manager of an incorporated enterprise may or may not hire one or more employees in addition to themselves and/or other owners of that business. See Status of Employment for more information.

Owner managers of unincorporated enterprises (OMUEs)

A person who operates his or her own unincorporated enterprise or engages independently in a profession or trade.

An owner manager of an unincorporated enterprise may or may not hire one or more employees in addition to themselves and/or other owners of that business. See Status of Employment for more information.

Paid leave entitlements

The entitlement of employees to paid holiday leave or paid sick leave (or both) in their main job.

Part-time workers in main job

People who were employees and usually work fewer than 35 hours a week in their main job, and did so in the reference week.

Part-time workers

Employed persons who usually worked fewer than 35 hours a week (in all jobs) and either did so during the reference week, or were not at work in the reference week. In this publication, part-time workers relates to part-time workers who were employees in their main job.

Reference week

The week preceding the week in which the interview was conducted.

Second job

A job, other than the main job.

Sector of main job

Sector of main job is used to classify a respondent's employer as a public or private enterprise. The public sector includes all government units, such as government departments, non-market non-profit institutions that are controlled and mainly financed by government, and corporations and quasi-corporations that are controlled by government.

Shift work

A system of working whereby the daily hours of operation at the place of employment are split into at least two set work periods (shifts) for different groups of workers. Types of shifts include:

- **Irregular shifts** - Describes shifts that do not follow a set pattern.
- **Regular shifts** - Shifts worked to a set pattern of times. Regular shift times are presented as follows:
 - morning shifts - between 6.00am and 12.00pm;
 - afternoon shifts - between 12.00pm and 5.00pm; and
 - evening, night or graveyard shift - between 5.00pm and 6.00am.
- **Rotating shift** - A shift arrangement, in which the shift worked changes periodically from one time period to another, for example from mornings or afternoons to evenings or nights.
- **Split shift** - Occurs when the worked period is broken by an extended unpaid 'free' period, thereby constituting an extended working day consisting of two (or more) shifts.

Sick leave

The entitlement of an employee to paid sick leave in their main job.

Standby

People who are usually waiting to restart work or people who have had to restart work after being recalled, without additional pay and allowances.

Status of Employment

Status of employment is determined by an employed person's position in relation to their job, and is in respect of a person's main job if they hold more than one job. Employed persons are classified according to the reported relationship between the person and the enterprise for which they work, together with the legal status of the enterprise where this can be established. The groups include:

- Employees
- OMIEs
 - OMIEs with employees
 - OMIEs without employees
- OMUEs
 - OMUEs with employees
 - OMUEs without employees and
- Contributing family workers.

Trade union

An organisation consisting predominantly of employees, the principal activities of which include the negotiation of rates of pay and conditions of employment for its members.

Trade union member

Employed persons with membership in a trade union in connection with their main job.

Weekly earnings

Amount of 'last total pay' (i.e. before taxation, salary sacrifice and other deductions had been made) from wage and salary jobs prior to the interview. For persons paid other than weekly, earnings were converted to a weekly equivalent. No adjustment was made for any back payment of wage increases, prepayment of leave or bonuses, etc.

With paid leave entitlements

Employees who were entitled to paid holiday leave or paid sick leave (or both) in their main job.

Without paid leave entitlements

Employees who were not entitled to paid holiday leave and paid sick leave, or did not know whether they were entitled to paid holiday leave or paid sick leave in their main job.

Worked on a fixed-term contract

Employees with a contract of employment which specifies that the employment will be terminated on a particular date/event.

Form of Employment (Appendix)

FORM OF EMPLOYMENT

The following provides an outline of how people are classified in the 'Form of employment in main job' data item.

Persons are classified as employees (excluding owner managers of incorporated enterprises (OMIEs)), owner managers of incorporated enterprises and owner managers of unincorporated enterprises (OMUEs) based on their responses to questions in the monthly Labour Force survey (LFS).

Employees (excluding OMIEs) from the LFS are persons who:

- work for a public or private employer; and
- receive remuneration in wages or salary; or are paid a retainer fee by their employer and worked on a commission basis, for tips, piece-rates or payment in kind.

Owner managers of incorporated enterprises from the LFS are persons who:

- work in their own incorporated enterprise, that is, a business entity which is registered as a separate legal entity to its members or owners (also known as a limited liability company).

Owner managers of unincorporated enterprises from the LFS are persons who:

- operate their own unincorporated enterprise, that is, a business entity in which the owner and the business are legally inseparable, so that the owner is liable for any business debts that are incurred. This category includes those engaged independently in a trade or profession.

These people from the LFS are then asked questions to identify key characteristics of employees, independent contractors and other business operators. The responses to these questions are then used to determine how people are classified as employees, independent contractors and other business operators in the 'Form of employment' data item.

These questions are:

"Do you work as an independent contractor in your job?"

"Do you receive a pay slip/advice?"

"Do you/Does your business invoice or bill clients/employers?"

"Excluding wages and salary, are you able to make drawings from your employer/business?"

The following decision table, shows how people are classified in the 'Form of employment' data item.

Decision table: Form of employment					
	Whether considered to be independent contractor?	Whether received pay slip/advice?	Whether invoices/bills clients/ employers?	Whether able to make drawings from employer/ business	Result
Employees (excluding OMIEs)	Yes	Yes	Yes		Independent Contractor
			No	Yes	Independent Contractor
			No		Employee
		No	Yes		Independent Contractor
	No			Independent Contractor	
	No	Yes			Employee
		No	Yes		Independent Contractor
			No		Employee
Owner managers (OMIEs and OMUEs)	Yes	Yes	Yes		Independent Contractor
			No	Yes	Independent Contractor
			No		Employee
		No	Yes		Independent Contractor
	No			Independent Contractor	
	No	Yes	Yes		Other Business Operator
			No	Yes	Other Business Operator
			No		Employee
		No	Yes		Other Business Operator
			No		Other Business Operator



Sufficient information was obtained from respondents after answering the second or third questions to determine their 'Form of employment', therefore people were not asked these questions to reduce respondent burden.

ABS data sources for earnings, employment income and total personal income (Appendix)

ABS data sources for earnings, employment income and total personal income

	Designed to measure	Frequency/Type of data source	Benefits	Primary publication
Average Weekly Earnings	The level of average weekly earnings of employees.	Biannual business survey.	Time series data available (including seasonally adjusted and trend estimates).	Average Weekly Earnings, Australia (cat. no. 6302.0).
Census	Total personal income collected in ranges. Household and family income imputed from personal income.	Population census conducted every 5 years.	Data available for small geographic areas.	Data available from ABS website (TableBuilder).
Characteristics of Employment	Earnings and the distribution of weekly earnings.	Annual household survey.	Detailed socio-demographic information and labour force statistics. Distributional data available.	Characteristics of Employment, Australia (cat. no. 6333.0)
Economic Activity Survey	Income, expenses, industry value added, operating profit before tax, capital expenditure, employment and wages and salaries.	Annual business survey combined with ATO administrative data (business activity statement).	Time series data available, cross classified by industry divisions and subdivisions.	Australian Industry (cat. no. 8155.0)
Employee Earnings and Jobs	Experimental employee earnings estimates using administrative data.	First publication using data from an experimental linked employer-employee database (LEED).	Demonstrates the feasibility linking employer and employee information to inform labour supply and labour demand and to provide a high quality job count.	Information Paper: Construction of Experimental Statistics on Employee Earnings and Jobs from Administrative Data, Australia (cat. no. 6311.0)
Estimates of Personal Income for Small Areas	Regional estimates of employment and total income for persons who lodge a tax forms, using data sourced from the Australian Tax Office (ATO)	Annual analysis of ATO administrative data (personal income tax).	Data for small areas, down to Local Government Area level.	Estimates of Personal Income for Small Areas, 2011-15 (cat. no. 6524.0.55.002)
Jobs in Australia	Jobs and the personal income they generate	Linked employer-employee database (LEED)	Reliable annual data on filled jobs and job-holders covering more than 2,200 regions across Australia.	Jobs in Australia (cat. no. 6160.0)
Labour Account Australia, Experimental Estimates	Costs incurred by enterprises in employing labour, and the incomes received by people from its provision	Annual and Quarterly. Balanced compilation of household, business and administrative sources	A time series of estimates of the number of employed persons, the number of jobs, hours worked and paid for and the income earned for each industry in one coherent framework.	Labour Account Australia, Quarterly Experimental Estimates (cat. no. 6150.0.55.003)
National Accounts	Compensation of employees, a very broad concept of employee remuneration.	Quarterly compilation based primarily on quarterly business surveys.	Broad measure of remuneration (includes, for example, annual bonuses and payment in kind).	Australian National Accounts: National Income, Expenditure and Product (cat. no. 5206.0).
Quarterly Business Indicators Survey	Revenue, profits, inventory and wages paid by private sector businesses.	Quarterly business survey.	Time series data available.	Business Indicators, Australia (cat. no. 5676.0).
Survey of Employee Earnings and Hours	Composition and distribution of earnings (weekly and hourly) of employees, hours paid for, and whether their pay is set by award, collective agreement or individual arrangement.	Biennial business survey with payroll employee component.	Data cross-classified by employer and some employee characteristics. Distributional data available.	Employee Earnings and Hours, Australia (cat. no. 6306.0).
Survey of Employment and Earnings	Public sector employee earnings paid by level of Government	Annual business survey.	Public sector estimates, by level of government.	Employment and Earnings, Public Sector, Australia (cat. no. 6248.0.55.002).
Survey of Income and Housing	A breakdown of household income, including wages and salaries.	Two-yearly household survey.	Distributional data on the broader context of household income and components available (including labour income) cross-classified by several employee characteristics.	Household Income and Income Distribution, Australia (cat. no. 6523.0).
Survey of Major Labour Costs	Total earnings as well as other labour costs borne by businesses, for example payroll tax.	Irregular (currently run every 6 years) business survey.	Earnings data in the broader context of labour costs. Data per employee also available.	Labour Costs, Australia (cat.no. 6348.0).
Wage Price Index	Changes in the price of wages and salaries resulting from market pressures.	Quarterly business survey.	Estimate of pure wage inflation removing the effect of composition.	Wage Price Index, Australia (cat. no. 6345.0).

Data Cubes (I-Note) - Data Cubes

Data cube Table 3: An issue has been identified in the compilation of earnings estimates used for mean earnings. These estimates have been revised in the August 2019 release of Characteristics of Employment.

Data Cubes (I-Note) - Data Cubes

Data cube Table 4: An issue has been identified in the compilation of earnings estimates used for mean earnings. These estimates have been revised in the August 2019 release of Characteristics of Employment.

Data Cubes (I-Note) - Data Cubes

Data cube Table 5: An issue has been identified in the compilation of earnings estimates used for mean earnings. These estimates have been revised in the August 2019 release of Characteristics of Employment.

Data Cubes (I-Note) - Data Cubes

Data cube Table 7: An issue has been identified in the compilation of estimates relating to usual days worked, and estimates relating to whether worked weekdays and/or weekends in all jobs. These estimates have been revised in the August 2019 release of Characteristics of Employment.

Data Quality (Technical Note) (Technical Note)

TECHNICAL NOTE DATA QUALITY

INTRODUCTION

1 Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings, they are subject to sampling variability. That is, they may differ from those estimates that would have been produced if all dwellings had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of dwellings was included. There are about two chances in three (67%) that a sample estimate will differ by less than one SE from the number that would have been obtained if all dwellings had been included, and about 19 chances in 20 (95%) that the difference will be less than two SEs.

2 Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate.

$$RSE\% = (SE/estimate) \times 100$$

3 RSEs for Characteristics of Employment estimates have been calculated using the Jackknife method of variance estimation. This process involves the calculation of 30 'replicate' estimates based on 30 different sub-samples of the original sample. The variability of estimates obtained from these sub-samples is used to estimate the sample variability surrounding the main estimate.

4 The Excel spreadsheets in the Downloads tab contain all the tables produced for this release and the calculated RSEs for each of the estimates. The RSEs for estimates other than medians have been calculated using the Jackknife method, and RSEs for the medians have been calculated using the Woodruff method.

5 In the tables in this publication, only estimates (numbers, percentages, means and medians) with RSEs less than 25% are considered sufficiently reliable for most purposes. However, estimates with larger RSEs have been included. Estimates with an RSE in the range 25% to 50% should be used with caution while estimates with RSEs greater than 50% are considered too unreliable for general use. All cells in the Excel spreadsheets with RSEs greater than 25% contain a comment indicating the size of the RSE. These cells can be identified by a red indicator in the corner of the cell. The comment appears when the mouse pointer hovers over the cell.

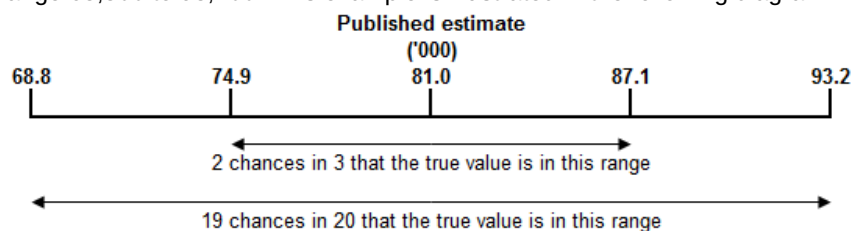
CALCULATION OF STANDARD ERROR

6 RSEs are routinely presented as the measure of sampling error in this publication and related products. SEs can be calculated using the estimates (counts or means) and the corresponding RSEs.

7 An example of the calculation of the SE from an RSE follows. An estimate of males aged 55–59 years who were employed part-time was 81,000, which has an RSE of 7.5%. The SE is:

$$\begin{aligned}\text{SE of estimate} &= (\text{RSE} / 100) \times \text{estimate} \\ &= 0.075 \times 81,000 \\ &= 6,100 \text{ (rounded to the nearest 100)}\end{aligned}$$

8 Therefore, there are about two chances in three that the value that would have been produced if all dwellings had been included in the survey would fall within the range 74,900 to 87,100 and about 19 chances in 20 that the value would fall within the range 68,800 to 93,200. This example is illustrated in the following diagram.



PROPORTIONS AND PERCENTAGES

9 Proportions and percentages formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSEs of proportions not provided in the spreadsheets is given below. This formula is only valid when x is a subset of y.

10 Considering an estimate of 1,532,300 males aged 25-34 years who were employed, 1,334,500 or 87.1% were full-time workers. The RSE for 1,334,500 is 1.2% and the RSE for 1,532,300 is 1.0%. Applying the above formula, the RSE for the proportion who were full-time workers:

$$RSE = \sqrt{(1.2)^2 - (1.0)^2} = 0.7\%$$

11 Therefore, the SE for the proportion who were full-time workers was 0.6 percentage points (= (87.1/100) x 0.7). Therefore, there are about two chances in three that the proportion of full-time workers is between 86.5% and 87.7%, and 19 chances in 20 that the proportion was within the range 85.9% to 88.3%.

SUMS OR DIFFERENCES BETWEEN ESTIMATES

12 Published estimates may also be used to calculate the sum of two or more estimates, or the difference between two survey estimates (of numbers, means or percentages) where these are not provided in the spreadsheets. Such estimates are also subject to sampling error.

13 The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x–y) may be calculated by the following formula:

$$RSE\left(\frac{x}{y}\right) = \sqrt{[RSE(x)]^2 - [RSE(y)]^2}$$

14 The sampling error of the sum of two estimates is calculated in a similar way. An approximate SE of the sum of two estimates (x+y) may be calculated by the following formula:

$$SE(x + y) = \sqrt{[RSE(x)]^2 + [RSE(y)]^2}$$

15 For example, an estimate of males aged 55–59 years who were employed part-time was 81,000, and the SE for this estimate was 6,100. For males aged 60-64 years who were employed part-time was 96,700 and the SE was 5,500. The estimate of the combined age group i.e. males aged 55–64 years who were employed part-time is:

$$81,000 + 96,700 = 177,700$$

16 The SE of the estimate of males aged 55-64 years who were employed part-time is:

$$SE = \sqrt{(6,100)^2 + (5,500)^2} = 8,200$$

17 Therefore, there are about two chances in three that the value that would have been produced if all dwellings had been included in the survey would fall within the range 169,500 to 185,900 and about 19 chances in 20 that the value would fall within the range 161,300 to 194,100.

18 While these formulae will only be exact for sums of, or differences between, separate and uncorrelated characteristics or subpopulations, it is expected to provide a good approximation for all sums or differences likely to be of interest in this publication.

STANDARD ERRORS OF MEANS AND SUMS

19 The estimates of means and sums of continuous variables are subject to sampling variability and random adjustment. As for population estimates, the variability due to sampling and random adjustment is combined into the calculated Standard Error, and the Relative Standard Error is reported. The component of variability arising from sampling is calculated using the Jackknife method.

STANDARD ERRORS OF QUANTILES

20 The estimates of quantiles such as medians, quartiles, quintiles and deciles are subject to sampling variability and random adjustment. As for population estimates, the variability due to sampling and random adjustment is combined into the calculated Standard Error, and the Relative Standard Error is reported. The component of variability arising from sampling is calculated using the Woodruff method. This is also true for Equal Distribution Quantiles.

SIGNIFICANCE TESTING

21 A statistical test for any comparisons between estimates can be performed to determine whether it is likely that there is a significant difference between two corresponding population characteristics. The standard error of the difference between two corresponding estimates (x and y) can be calculated using the formula in paragraph 9. This standard error is then used to calculate the following test statistic:

$$\left(\frac{x - y}{SE(x - y)} \right)$$

22 If the value of this test statistic is greater than 1.96 then there is evidence, with a 95% level of confidence, of a statistically significant difference in the two populations with respect to that characteristic. Otherwise, it cannot be stated with confidence that there is a difference between the populations with respect to that characteristic.

23 The imprecision due to sampling variability, which is measured by the SE, should not be confused with inaccuracies that may occur because of imperfections in reporting by respondents and recording by interviewers, and errors made in coding and processing data. Inaccuracies of this kind are referred to as non-sampling error, and they occur in any enumeration, whether it be a full count or sample. Every effort is made to reduce non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers, and efficient operating procedures.

Quality Declaration - Summary

QUALITY DECLARATION - SUMMARY

INSTITUTIONAL ENVIRONMENT

For information on the institutional environment of the Australian Bureau of Statistics (ABS), including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

RELEVANCE

The 2018 Survey of Characteristics of Employment (COE) presents information about the distribution of weekly earnings in main job and all jobs, employment arrangements, trade union memberships, independent contracting, working arrangements and persons who found their job through a labour hire firm. The collection of a range of socio-demographic and labour force characteristics makes the datasets produced from the survey extremely valuable for comparing and analysing the distribution of both weekly and hourly earnings across different population groups. Data are used in the development and review of wages and labour market policies, and in wage negotiation processes.

TIMELINESS

The Characteristics of Employment survey is conducted annually in August as a supplement to the Australian Bureau of Statistics (ABS) monthly Labour Force Survey (LFS). Results from this survey are released in the publication Characteristics of Employment, Australia (cat. no. 6333.0).

ACCURACY

Estimates from the Characteristics of Employment Survey are subject to sampling and non-sampling errors. Relative standard error (RSE) is a measure of the size of the sampling error affecting an estimate, i.e. the error introduced by basing estimates on a sample of the population rather than the full population. Non-sampling errors are inaccuracies that occur due to imperfections in reporting by respondents and interviewers, and errors made in coding and processing data.

This publication was designed primarily to provide estimates at the Australia level. Broad estimates are available for state/territory and/or greater capital city/rest of state, though users should exercise caution when using estimates at this level because of the presence of high sampling errors. Relative Standard Errors for all estimates are available in the relevant Datacube. More information on Standard Errors is available in the Technical Note of this release.

For further information regarding the accuracy of the COE survey estimates see the Technical Note.

COHERENCE

Caution should be exercised when comparing the estimates from this release with previous similar surveys as some data items have changed and population groups are conceptually different.

Caution should be exercised when comparing results from the 2018 COE to previous Forms of Employment (FOE) (2008–2013) and Employee Earnings, Benefits and Trade Union Membership (EEBTUM) as the population Employees in this release is not directly comparable to the Employees population in both FOE and EEBTUM. Revised historical estimates on a coherent basis were re-published in the August 2017 issue of COE (cat. no. 6333.0)

For information on the comparability of time series for the publication Employee Earnings, Benefits and Trade Union Membership, Australia (cat. no. 6310.0), see the Explanatory Notes.

For information on the comparability of time series for the publication Forms of Employment, Australia (cat. no. 6359.0), see the Explanatory Notes.

For information on the comparability of time series for the publication Working Time Arrangements, Australia (cat. no. 6342.0), see the Explanatory Notes.

INTERPRETABILITY

Contained within COE are Datacubes with commented data to aid interpretation of the results of the survey. Detailed Explanatory Notes, a Technical Note and a Glossary are also included providing information on the terminology, classifications and other technical aspects associated with these statistics.

Further commentary is often available through articles and data published in other ABS products, including:

- Labour Force, Australia (cat. no. 6202.0); and
- Concepts, Sources and Methods (cat. no. 6102.0.55.001).

DATA ACCESS

Characteristics of Employment, Australia (cat. no. 6333.0) is released electronically via the ABS website as Datacubes in spreadsheet format. Additional data may be available on request (subject to data quality). Note that detailed data can be subject to high relative standard errors.

For users who wish to undertake a more detailed analysis of the data, the survey microdata will be released through the TableBuilder product. For more details, refer to the TableBuilder information, Microdata, Characteristics of Employment, Australia (cat. no. 6333.0.00.001). For more information see About TableBuilder.

For further information about ABS data available on request, contact the National Information and Referral Centre on 1300 135 070 or via email to <client.services@abs.gov.au>.

